

#2

OIKE

P.5

RAW SEQUENCE LISTING

DATE: 10/18/2001

PATENT APPLICATION: US/09/963,299

TIME: 09:52:09

Input Set : A:\LEX-0246-USA SEQLIST.txt

Output Set: N:\CRF3\10182001\I963299.raw

ENTERED

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4 <110> APPLICANT: Abuin, Alejandro
5     Zambrowicz, Brian
6     Sands, Arthur T.
8 <120> TITLE OF INVENTION: Novel Murine Polynucleotide Sequences
9     and Mutant Cells and Mutant Animals Defined Thereby
12 <130> FILE REFERENCE: LEX-0246-USA
C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/963,299
C--> 14 <141> CURRENT FILING DATE: 2001-09-26
14 <150> PRIOR APPLICATION NUMBER: US 60/237,272
15 <151> PRIOR FILING DATE: 2000-10-02
17 <160> NUMBER OF SEQ ID NOS: 1000
19 <170> SOFTWARE: FastSEQ for Windows Version 4.0
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 394
23 <212> TYPE: DNA
24 <213> ORGANISM: Mus musculus
26 <220> FEATURE:
27 <221> NAME/KEY: misc_feature
28 <222> LOCATION: (1)...(394)
29 <223> OTHER INFORMATION: n = A,T,C or G
31 <400> SEQUENCE: 1
32 gactgagggg agctccttca accagtatca ctctctccc cgccagagta agcagggccc      60
33 agctcataga gccgaggggg caactcagac aagctgaatt tccaagactc aagagaaggg      120
W--> 34 aatctgcaag atgactcaaa ccagagcagc gtgcctggaa gaagcanaaa ccagacgagc      180
35 tggaagagat aggatcaacc cgaggcgccct gggaagaagt gcccgacctg cttcgttgcc      240
36 tgcaggctgt gcagtgtgct cctgagaact gtcacccatg ctggggcggg ccttcatgat      300
37 gcagctgtct tttaaacatc tctgtaagtg ctacccctca cccacattcc tgtaagtgc      360
38 ttcaataaaa cccattgctt catcaaaaaa aaaa      394
40 <210> SEQ ID NO: 2
41 <211> LENGTH: 495
42 <212> TYPE: DNA
43 <213> ORGANISM: Mus musculus
45 <220> FEATURE:
46 <221> NAME/KEY: misc_feature
47 <222> LOCATION: (1)...(495)
48 <223> OTHER INFORMATION: n = A,T,C or G
50 <400> SEQUENCE: 2
W--> 51 ttctgtagag ggccatanct ncagcatccc agccactgcc acctncangt caatgctcan      60
W--> 52 gccnagcctt gcagccantc aaagccangg aactcttccc caaacggacg antcccggag      120
W--> 53 ctctcccctt tttttcccgg gtcacacccc cgggcccctg ggcctagant ctgacctgtg      180
W--> 54 agccccccact tccantcctt agctntttct gcagcttcca gcggtgcctg ggtgtccgag      240
W--> 55 agcctgagan ccagacggtc ccagccctgt gacaaacaga tgcgggaccc caccaaccct      300
56 acagctcagt ggtaggagg tctttactgc tctaccagga ggttgagttc ggttccaac      360
57 actcatgtca cataactcac aagcacgtgt aactctaagg aaccattcct tcccacttct      420
58 gacctctgaa gggcagacac actaataaac atacacacat tcaataaata aataaatctt      480
59 ttaaaaggaa aaaaa      495
61 <210> SEQ ID NO: 3
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62 <211> LENGTH: 289
63 <212> TYPE: DNA
64 <213> ORGANISM: Mus musculus
66 <220> FEATURE:
67 <221> NAME/KEY: misc_feature
68 <222> LOCATION: (1)...(289)
69 <223> OTHER INFORMATION: n = A,T,C or G
71 <400> SEQUENCE: 3
W--> 72 tcccagaaac cacatggngg ncntcacaac ccgncnaanc aagcgctgac nccctnttnt      60
W--> 73 ggtgtgtctg aaganagcgt acagtttacc ttatttataa taataaaaaa tctttgggct      120
W--> 74 gnancaagcg gancctgaca tggagcgagt ggggcctaaa ttttaaaaaa atttttttct      180
W--> 75 ttttttcant acttaaaaat gccacctttg tagctgtatt ntggaaaagt cccaactggc      240
76 atgacatttt ctatatatgt taataaagct gagttttcta accacctaa      289
78 <210> SEQ ID NO: 4
79 <211> LENGTH: 244
80 <212> TYPE: DNA
81 <213> ORGANISM: Mus musculus
83 <400> SEQUENCE: 4
84 gactgagtgt tttgcctgtg tgtatatatg tacacgtatg tacaccatgt catgagcctc      60
85 catggctgtg agaggacttt ggatcccttg gaactggcgt tacattggtc gtgagcctcc      120
86 atgttggcgc tgagaagcaa acctgggttc tctggaagcg cagcaagtgc tcttaaccat      180
87 cgagccatct ctccatctca aaccacccat gtatataaaa tgaaaataca taaacaaaaa      240
88 aaaa      244
90 <210> SEQ ID NO: 5
91 <211> LENGTH: 277
92 <212> TYPE: DNA
93 <213> ORGANISM: Mus musculus
95 <220> FEATURE:
96 <221> NAME/KEY: misc_feature
97 <222> LOCATION: (1)...(277)
98 <223> OTHER INFORMATION: n = A,T,C or G
100 <400> SEQUENCE: 5
101 gactgagggg ctctggcaag aggcgctgcc ttgcctatga ggaagctgaa gcacagagag      60
W--> 102 attatggcac tgggtggggac cgganagatg tctcattagg ctaagcctct cctgtccttg      120
W--> 103 ntgaggacct gaattnantt gccagcagct cacaaccann tggaactcca nctccggggg      180
104 atctgacacc ctcttctgcc cttctagaac taccatattc atgtgcacac actcatatac      240
105 aaatcactta aaatacaaat aaacattcta ctaaaagg      277
107 <210> SEQ ID NO: 6
108 <211> LENGTH: 496
109 <212> TYPE: DNA
110 <213> ORGANISM: Mus musculus
112 <220> FEATURE:
113 <221> NAME/KEY: misc_feature
114 <222> LOCATION: (1)...(496)
115 <223> OTHER INFORMATION: n = A,T,C or G
117 <400> SEQUENCE: 6
W--> 118 tgaagcactc ccgcttgctt ggacnctccn tagtgcgang cggngtaact caaantagct      60
119 tcaggaggtc cctgaaactg accagacgtc acctaggccc ctcccttctg agaactaagc      120
120 aatacagacc tgagagtcca ccctcagact gcctgagctg cacagaagac tgaggcagct      180

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121 gagcagccag gactcaagca agctgagcct tcaaagaaga ttctcagagg agaaaaccag      240
122 cgaagacaac tcagaccaga tcagcttcct ggaagagggt tagcctggaa acctgaggca      300
123 cctggaaaagg acactcttca acctgtggag ctgcctgatg actgtgcaat gcgcttcagg      360
124 ttcccaactg tgtgagctgt caccatgct ggagtgggt ttcgtaatat agctgtcttt      420
125 gagttatttc tgttcttgta actaaccct catccatact tctgtaggta atccaaatga      480
126 actcaattgt tcacca                                     496
128 <210> SEQ ID NO: 7
129 <211> LENGTH: 233
130 <212> TYPE: DNA
131 <213> ORGANISM: Mus musculus
133 <220> FEATURE:
134 <221> NAME/KEY: misc_feature
135 <222> LOCATION: (1)...(233)
136 <223> OTHER INFORMATION: n = A,T,C or G
138 <400> SEQUENCE: 7
W--> 139 cacacgttgg agaaacgatn tgcagcctgg cnnanncatg cctctgccaan cagagcntga      60
W--> 140 ggcaaatcat agtcagctgc tgcnnatagca gcccacatagc accacacctg ggattaaaaat      120
141 gaaaatgtat aatattccag aattttcact ataccttata ttggaaaaaa ccttcctaaa      180
142 gttcaccgta aaaggccttt agtcttttta aaaaatatat ttatttttaa gta                233
144 <210> SEQ ID NO: 8
145 <211> LENGTH: 219
146 <212> TYPE: DNA
147 <213> ORGANISM: Mus musculus
149 <220> FEATURE:
150 <221> NAME/KEY: misc_feature
151 <222> LOCATION: (1)...(219)
152 <223> OTHER INFORMATION: n = A,T,C or G
154 <400> SEQUENCE: 8
W--> 155 agactgagta ttatttgtgt ntgggtgggga gcgtgccttt ggtgacnnag agggcttnaa      60
W--> 156 gacgcctccn tctgaaggaa caggetgtgc aatgcttcac atggattctg gaagagcatc      120
157 aagcactctt aaccactgag ccatctctcc gacccctgaa ttttcatgta ctagctttct      180
158 ggcattgtgc ttgttcatta aaaaaaaagg tctattatt                219
160 <210> SEQ ID NO: 9
161 <211> LENGTH: 364
162 <212> TYPE: DNA
163 <213> ORGANISM: Mus musculus
165 <400> SEQUENCE: 9
166 gactgagttc tacagattga acctagggcc ttagcaatgc taggcaaaca ctgggctaca      60
167 gctctagcac aagacttccg gatccaaaca ttcttcagct gtgatgcaaa ccttttgctt      120
168 gtgcaacatt catctgaact gacttgcacg gcccacacgg gactgaggat aaggagagcc      180
169 cgatgtgaac ataaaacttg ttgctctaca cctacgtgc gaccctttta ttcagtcctt      240
170 catggtgtgg caaccogaac cagaacattc ttttcattgc tacttcatag ctgtaatttt      300
171 gctactgtta cgatttataa tgtaaataa tgtttttctg tgggtgttaa gtgaaaaaaa      360
172 aaaa                                     364
174 <210> SEQ ID NO: 10
175 <211> LENGTH: 559
176 <212> TYPE: DNA
177 <213> ORGANISM: Mus musculus
179 <220> FEATURE:

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Output Set: N:\CRF3\10182001\I963299.raw

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180 <221> NAME/KEY: misc_feature
181 <222> LOCATION: (1)...(559)
182 <223> OTHER INFORMATION: n = A,T,C or G
184 <400> SEQUENCE: 10
W--> 185 ccggggtgag gaatcngtca tgctattgat catcccgatg ngactntgnt gatgcangct      60
W--> 186 ggtggganag gggaaaaaat ntccccgtca ctgcccgtac ctaaatnnch tccctgacga      120
W--> 187 nggaccgccc tccatcagac ganctgcact tcctgggtccg agtgcancnt gtccncctgt      180
W--> 188 acctccctct gcttgccggc ctccaannan agcctctgtt ttgtttgcnn canngcgtct      240
W--> 189 gtccctctgta ggcctggaca ntccctggana atttgctatg tagaccgggc tgggantaag      300
W--> 190 ctcaactttat acaaganaac attaacagga ggctggaaag atagctcagc ggttcctagc      360
191 accacatggg ttggttcaca acagcttgta attccagctc caggagactt aataaccccc      420
192 cgctctgaac tgtgaggggtg cactgggcag attctcacag atacacaaac acacacaaat      480
193 ttctttcttaa aaaggaaaca ttaacagatt ctagaggaac tggatgaaaa ggaataaaaa      540
194 aaggattttg ttttgtttt                                     559
196 <210> SEQ ID NO: 11
197 <211> LENGTH: 441
198 <212> TYPE: DNA
199 <213> ORGANISM: Mus musculus
201 <220> FEATURE:
202 <221> NAME/KEY: misc_feature
203 <222> LOCATION: (1)...(441)
204 <223> OTHER INFORMATION: n = A,T,C or G
206 <400> SEQUENCE: 11
W--> 207 gactgagatg ctgctganag ttgagatcca caggatgcct gtccctctctg ctatggagtg      60
208 acctgccacc atgacttctc tgccgcctgt aaggagtgtg tccctaagac tgtgagccaa      120
209 aggaaccctg cgtccttggg ttgcctctctg tcagcctccc ccagccttga agcaggctga      180
210 tcagaatttg accttgctgc cactgagaat gagaccacct ggggtggagc cttccaactt      240
211 agatggctct attgttctgt ctgctcttct ccaaaattct gctacctgct gagaggccct      300
212 tgagatattc cagagacagc atccagcaga tccacctaca cgctggcaac aggcatacaag      360
213 aatggattgg cagggaatgg gctcccccct ttataagca cagactctta gtaaacttgg      420
214 gggccttgaa cagaaaaaaa a                                     441
216 <210> SEQ ID NO: 12
217 <211> LENGTH: 244
218 <212> TYPE: DNA
219 <213> ORGANISM: Mus musculus
221 <220> FEATURE:
222 <221> NAME/KEY: misc_feature
223 <222> LOCATION: (1)...(244)
224 <223> OTHER INFORMATION: n = A,T,C or G
226 <400> SEQUENCE: 12
W--> 227 gactgaggtg ttcttgagga ccttggcngt cagagaggct tctttgcaag aggacctggg      60
228 tccctgggtc tgtgtccctg cgttccacat actggctcac aactgtctgt aactgcagtt      120
229 ccaggagctc cagcgccctc ttctggcctt tgtggcactg cattaacaca gtgcatctat      180
230 gtccaggccg aacatcatac acataaaaga ataaaataga aaatgtttga gttaaaaaaa      240
231 aaaa                                     244
233 <210> SEQ ID NO: 13
234 <211> LENGTH: 144
235 <212> TYPE: DNA
236 <213> ORGANISM: Mus musculus

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238 <400> SEQUENCE: 13
239 agactgagga gattttctca gcaacatcat ttaaaaggaa attaatggcg aaaatggggc      60
240 attgggaaac catgggggag gggggagact gagagaatga gaatgaataa tggcaaaata      120
241 aataaataaa taaataaata aaaa                                     144
243 <210> SEQ ID NO: 14
244 <211> LENGTH: 395
245 <212> TYPE: DNA
246 <213> ORGANISM: Mus musculus
248 <220> FEATURE:
249 <221> NAME/KEY: misc_feature
250 <222> LOCATION: (1)...(395)
251 <223> OTHER INFORMATION: n = A,T,C or G
253 <400> SEQUENCE: 14
W--> 254 tgcagagggtg aagagacccc gancccanaa ctggtgctgc ttatntaggc ctangagagg      60
255 agtgtcttca cacctggatt ggttatgcac tacagcctca tttgcatgat cctcatcctg      120
W--> 256 attggctact ctctctctgt acctcacaga gcctcattat catacctnat ttgcatgtct      180
W--> 257 cacacctgat tggntatagt ctcaaagcct cattatcatg cccggggccag gcagngtctt      240
W--> 258 tgcaaaaaac tttactgcat atgtacacat tggttgtttg tccaaactta tgcgtggngg      300
259 ccagcagtag tcagtgccac tctgcaacgg cacatgtggc ttccacatc tccccctttt      360
260 tgttttaata aaatgaggct ggactaggcc tgtgc                                     395
262 <210> SEQ ID NO: 15
263 <211> LENGTH: 324
264 <212> TYPE: DNA
265 <213> ORGANISM: Mus musculus
267 <220> FEATURE:
268 <221> NAME/KEY: misc_feature
269 <222> LOCATION: (1)...(324)
270 <223> OTHER INFORMATION: n = A,T,C or G
272 <400> SEQUENCE: 15
W--> 273 gactgagaca gctacttaat ctttcccgca cacaccttga ccaacagcan ccaaccaaca      60
274 acccacccca tcaactcgga ccctagcatt tatagaccct ctggaaagtc ctcaaattcc      120
275 aaatgtcaca caattgcaga aactatctgc agttggcaaa aaacgtgcct ctgctagagc      180
276 acctaagcaa atcagagtca gctgctgtgg acagaatgaa gcagcccat atcccatacg      240
277 tgggattaaa caaaaatata ttcttataat atttctgtgg ttttaaata aaccgaaatt      300
278 tcaaaattgt cactaaaaaa aaaa                                     324
280 <210> SEQ ID NO: 16
281 <211> LENGTH: 310
282 <212> TYPE: DNA
283 <213> ORGANISM: Mus musculus
285 <220> FEATURE:
286 <221> NAME/KEY: misc_feature
287 <222> LOCATION: (1)...(310)
288 <223> OTHER INFORMATION: n = A,T,C or G
290 <400> SEQUENCE: 16
W--> 291 gactgaggaa ggcctgctg ggcaaggng gccctctcca gaggagcact ctactatgag      60
W--> 292 cctccacctg cttctccatt tgaangngang acctnccatc cggagctgga naanngnctc      120
W--> 293 ancngttaan agcactnact gctcttggag aggaccacaga ccagctccca naagccatat      180
W--> 294 cggnagcnca caatcttcta tgactctgnt ngcggggaga atctgacact gtcttctgga      240
295 taggaagtct ttttctctgt ctagcctctt caataaagac atctgcgtgt cctcacccca      300

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→ Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

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Input Set : A:\LEX-0246-USA SEQLIST.txt

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L:14 M:270 C: Current Application Number differs, Replaced Current Application No
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:34 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:51 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:52 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:53 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:54 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:55 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:72 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:73 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:74 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:75 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:102 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:103 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:118 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:139 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:140 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:155 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:156 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:186 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:187 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:188 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:189 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:190 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:207 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:227 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:254 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:257 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:258 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:273 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:291 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:292 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:293 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:294 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:309 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:310 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:312 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:313 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:328 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:329 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:357 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:358 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:378 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:379 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:380 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21

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L:381 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:396 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22